CLAIMS

[1] A polysulfone permselective hollow fiber membrane bundle which contains poly(vinylpyrrolidone) and which shows a hydrogen peroxide-eluting amount of 5 ppm or less, when subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus.

[2] A polysulfone permselective hollow fiber membrane bundle according to claim 1, which shows a hydrogen peroxide concentration of 5 ppm or less in every one of eluates from 10 portions into which the hollow fiber membrane bundle is divided in the lengthwise direction, when each of said portions is subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus.

[3] A polysulfone permselective hollow fiber membrane bundle according to claim 1 or 2, wherein, when said hollow fiber membrane bundle is subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus, the amount of poly(vinylpyrrolidone) eluted from said hollow fiber membrane bundle is 10 ppm or less.

[4] A polysulfone permselective hollow fiber membrane bundle according to any of claims 1 to 3, wherein said poly(vinylpyrrolidone) is crosslinked.

[5] A polysulfone permselective hollow fiber membrane

bundle according to any of claims 1 to 4, wherein said poly(vinylpyrrolidone) is insolubilized.

[6] A polysulfone permselective hollow fiber membrane bundle according to any of claims 1 to 5, wherein, when said hollow fiber membrane bundle is subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus, after having been stored at room temperature for one year, the maximum value of the UV absorbance of an eluate from the hollow fiber membrane bundle at a wavelength of 220 to 350 nm is 0.10 or less.

[7] A process for manufacturing a polysulfone permselective hollow fiber membrane bundle, said process comprising the step of spinning a solution which contains a polysulfone polymer, poly(vinylpyrrolidone) and a solvent, wherein the content of hydrogen peroxide in said poly(vinylpyrrolidone) is 300 ppm or less.

[8] A process according to claim 7, including the steps of previously kneading said components, and stirring and dissolving the resultant knead mixture in a dissolution tank.

[9] A process according to claim 7, wherein said components are dissolved in a dissolution tank equipped with a kneading device.

[10] A process according to claim 8 or 9, wherein the kneading and/or dissolving of at least

poly(vinylpyrrolidone) is carried out at a temperature of not higher than 70°C under a nitrogen atmosphere.

[11] A process according to any of claims 8 to 10, wherein the dissolution is carried out under conditions of a Froude number of 0.7 to 1.3 and a Reynolds number of 50 to 250.

[12] A process according to any of claims 7 to 11, including the step of drying the hollow fiber membrane bundle by irradiating the same bundle with microwave under a reduced pressure.

[13] A process according to claim 12, wherein said drying is carried out by irradiating the hollow fiber membrane bundle with microwave having a low output of 20 kW or less under a reduced pressure of 0.1 to 20 kPa.

[14] A process according to claim 12 or 13, wherein said drying is carried out while the output of microwave is being sequentially decreased in accordance with a decrease in the moisture content of the hollow fiber membrane bundle.

[15] A process according to any of claims 7 to 14, comprising the step of subjecting, to a crosslinking treatment, a hollow fiber membrane bundle which shows a hydrogen peroxide concentration of 3 ppm or less in every one of eluates from 10 portions into which the hollow fiber membrane bundle is divided in the lengthwise direction, when each of said portions is subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus.

[16] A blood purifier packed with a polysulfone permselective hollow fiber membrane bundle defined in any of claims 1 to 6.

[17] A blood purifier according to claim 16, wherein, when said blood purifier is subjected to an eluation test regulated in the Approval Standard for Dialysis-type Artificial Kidney Apparatus, after having been stored at room temperature for one year, the maximum value of the UV absorbance of an eluate therefrom at a wavelength of 220 to 350 nm is 0.10 or less.